

**System and Methods for a Vernam Cipher, a Keyed One-Way Hash  
and a Non-Cyclic Pseudo-Random Number Generator**

Abstract:

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The invention discloses a cryptographic system and consisting of three  
methods: a cryptographic Vernam stream cipher that permits software programs on  
separate computers to encrypt and decrypt information; a cryptographic keyed one-  
way hash that ensures the integrity and authenticity of a message; a non-cyclic  
10 pseudo-random number generator that permits a software program inside a  
computer to create large amounts of pseudo-random bits at high data rates.

Patent Docket